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Grimy Tale of Missed Chance To Prevent Abolition of OTA

The Office of Technology Assessment was packing up for oblivion last week, following a Congressional vote in which a sister research agency on Capitol Hill, the venerable Library of Congress, helped sink the beleaguered OTA.

Money alone apparently was the motivating factor for the Library, which expressed concern that it would be required to finance a \$15 million rescue plan that would make the now-independent OTA a part of the Library's Congressional Research Service (CRS).

OTA officials are publicly silent about the Library's role in settling their fate. But in private conversation, their references to James Billington, the Librarian of Congress, are angry and spiced with invective. "The Librarian lobbied intensively against OTA," SGR was told, even after it was clear that OTA's proposed escape from the Republican ax would not be at the expense of the Library. In a spiteful retaliation engineered by aggrieved Congressional backers of OTA, the agency will consign its computers, furniture, files,

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and other materials to the Architect of the Capitol, rather than the more likely recipient, the Library of Congress.

With close ties to academe, science, and industry, OTA, founded in 1972, is an island of scholarship on Capitol Hill, though most of its many admirers are located elsewhere. In any case, Republican budget cutters early in their new control of Congress targeted OTA for elimination to show that federal frugality begins at home. Calling OTA duplicative, out of synch with Congressional needs, and tainted by long Democratic control of Congress, they decreed its abolition, rather than a mere reduction in budget. OTA also suffered from a shortage of easy sacrificial lambs as Congress tried to cut \$200 million from its own spending for pay, expenses, buildings, and all else next year. The final legislative budget works out to about \$1.7 billion, but every million counted on the way to that sum.

The House Appropriations Committee voted zero in funds for OTA in June. But then, in a surprise turnabout, the House voted, 220-204, to keep OTA afloat with a complex financial and organizational formula involving the Library of Congress. The balance was swung by moderate Republicans, led by Rep. Amo Houghton (R-NY), who would normally be the Chairman of OTA's 12-member Congressional Board in this Congress if Speaker Gingrich chose to appoint the House (Continued on Page 3)

Study Alleging PhD Glut Stirs up the Establishment

With "downsizing" enthroned as the foulest word in academic politics, indignation is rapidly rising over a new study that says the nation's PhD system is pouring science, math, and engineering graduates into saturated job markets.

The report, by William F. Massy, Professor of Education at Stanford, and Charles A. Goldman, a RAND researcher, says the production of doctorates exceeds job availability in most fields and overshoots the market by an average of 25 percent in computer sciences and civil, electrical, and mechanical engineering. The study was financed with a \$250,000 grant from the Alfred P. Sloan Foundation, a mainstream philanthropy which normally does not bankroll troublemaking inquiries.

For university managers and their political friends, the thesis is unpalatable enough as Washington relishes any or (Continued on Page 2)

In Brief

Another attempt to append "Engineering" or "Technology" to the name of the National Science Foundation was defeated in June in the House Science Committee. But the leading sponsor, the National Society of Professional Engineers (NSPE), vows in its house organ, Engineering Times, to keep up the fight. The latest of the many nomenclature assaults on what scientists like to think of as their own bank was sponsored by Rep. Joe Barton (R-Texas), who's an engineer. Barton's proposal to call it the National Science and Engineering Foundation went down, 22-16, with 12 members not voting. NSPE describes the vote as encouraging and urges engineers to intensify grassroots lobbying to make it the NS&EF.

The academic pork barrel is thriving this year, according to Rep. George Brown (D-Calif.), who tracks the "earmarks" that members of Congress quietly slip into appropriations bills in behalf of hometown universities. The total so far in just four House appropriations bills for the coming fiscal year is \$64 million, only \$5 million short of the full-year total last time around, according to Brown's tabulations. Noting that the big pork rush occurs late in the appropriations process, Brown said Congress "is on track to setting new world records for earmarks."

A book collaboration is planned by House Science Chairman Robert Walker and George Keyworth, who served as Science Advisor in the Reagan White House. As Keyworth explained to SGR, their cue is Science, the Endless Frontier, Vannevar Bush's masterplan for postwar federal support of science. The theme, said Keyworth, is "on how Vannevar Bush would do it if he woke up in the middle of the information age."

... Study Ignores Industrial Employment, Critic Says

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even no reason to cut federal spending.

But the distaste for such talk is compounded by the study's assertion that, in large part, PhD production mindlessly rolls on because professors like the research and teaching assistance and intellectual stimulation that are inexpensively provided by graduate students.

At his own school, Massy observed, "there is a sense that this is what we are entitled to as faculty. It's part of our intellectual culture." More federal money for academic research, the authors say, would simply worsen the problem by financing the production of more PhDs.

Despite the normally torpid pace of academic discourse, the report, released in June, has already evoked several

The Production and Utilization of Science and Engineering Doctorates in the United States (236 pp., \$20).

Order from: Stanford Institute for Higher Education Research, 508 CERAS, Stanford University, Stanford, Calif. 94305; tel. 415/723-7725; fax 415/725-3936.

critical responses from the heart of the establishment. First out, apparently, was a paper by Charlotte Kuh, on board, as of August 1, as head of the Office of Scientific and Engineering Personnel at the National Academy of Sciences. Kuh, formerly with the Educational Testing Service, titles her critique: "Comments on the Usefulness of the Massy/Goldman Study in the Formulation of National Policy Concerning the Graduate Education of Scientists and Engineers."

Massy and Goldman, she concedes, "have used very sophisticated modeling techniques and have gone to tremendous lengths to inform their work with virtually all available data on doctoral production and academic employment."

Nonetheless, Kuh states, their conclusions "are not justified by their heroic efforts. Without engaging in technical nitpicking, the major fault is that only academic demand is modeled, and it is modeled simplistically. Thus, what is called an 'employment gap' is really the difference between academic demand for new hiring and PhD production." SGR was unable to reach the authors for their reaction to this damning analysis.

Among other criticisms, Kuh states the report lacks an "appreciation of the interactions between sponsored research in universities and industrial demand for PhDs. It is quite possible," she speculates, "that university-sponsored basic research may have a multiplier effect on industry-sponsored applied research and consequent demand for PhDs."

The Kuh critique continues: "What would happen if we cut back on federally funded university research in order to slow the 'PhD machine' or narrow the 'employment gap'? The outcome," Kuh suggests, "might well be undesirable not only for those who would like to obtain PhDs and go into non-academic employment but also for the research intensive parts of the economy as a whole."

Another critique, from the National Science Foundation's Division of Science Resources Studies, says the Massy-Goldman "analysis relies on highly questionable assumptions, i.e., a steady state equilibrium in 1990. We do not think this is a useful portrait of the labor markets for S&E PhDs," the NSF report concludes.

Shrinking Math Market

From an article, "Myths in Math," discussing expectations that the math job market "will get better again soon," in the August Notices of the American Mathematical Society, by Charles E. Mannix Jr., a 1993 math PhD in private business, and Kenneth A. Ross, Professor of Mathematics, University of Oregon and President of the Mathematical Association of America, a 30,000-member organization headquartered in Washington.

The unemployment situation facing young people in mathematics is far worse than dismal unemployment statistics for any single year's class suggest. Consider the invisible "unemployed." There is already the equivalent of several years' annual PhD production embedded in the woodwork of US colleges and universities as post-docs, part-time faculty, adjunct faculty, and, of course, the actively unemployed. This accumulation vigorously competes with any current year's graduates for the annual pool of available full-time tenure track openings. At current hiring levels, it would take some years to absorb this backlog, even if all PhD production suddenly ceased....

There is likely no single answer to this employment problem. A spectrum of changes and reforms will be needed to improve the situation. We doubt that industry can absorb the excess PhD production.... Surely, we must encourage all realistic, sensible attempts to increase suitable opportunities in industry, government, and academia.... This leads directly to the necessity of reexamining the size and content of our graduate programs. These of course are related and are determined by our conception of where our students are going. Thus, we badly need to reexamine our goals and purposes, our definitions and requirements....

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... Library Warns of Costs of Plan to Rescue OTA

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members. Their terms, unlike those from the Senate, expire with each Congress. However, no one seems to notice that OTA lacks a Board, but carries on anyway, with Houghton filling the Chairman role and working tirelessly to mobilize support for OTA.

Under the House scheme for saving OTA, the budget would be cut from the current \$22 million to \$15 million, and OTA would be attached to the Congressional Research Service, a fast-reaction research and information outfit of which Congress is quite fond. The \$15 million would indeed have come out of the Library's badly stretched budget, which this year consists of \$60 million for the CRS and \$202 million for all other Library activities. The Library was justifiably alarmed at its involuntary selection for savior of OTA.

OTA's surprise survival in the House was followed in July by a fully expected wipeout vote by its Appropriations Subcommittee in the Senate, chaired by Senator Connie Mack (R-Fla.), who had repeatedly vowed to kill the agency. Rejecting the proposed transfer of OTA to the Library, Mack's appropriations report stated that the two organizations differ in "purposes, procedures, methodologies, management, and governance" and the "merger of the two would substantially harm the Congressional Research Service." The main difference between the two agencies is that CRS produces reams of very short reports, quickly, while OTA turns out very big ones, often magisterial, and not infrequently—until the crisis of abolition induced a speedup—two years or more in the works.

Following full Committee approval of Mack's report, OTA's survival strategy switched to the floor of the Senate, where votes were being rallied for repeating the rescue in the House.

Aware of the Library's anxiety, the Senate friends of OTA backed a revised plan, introduced by Senator Ernest Hollings (D-SC), that would have made the linkup with OTA cost free for the Library's overall budget. Hollings is a longtime member of both OTA's Congressional Board and the Appropriations Committee, positions that count when in majority, but rate far less in minority. Nonetheless, optimism prevailed in the OTA camp because of strong support from a notable Republican conservative, Senator Orrin Hatch, of Utah, another oldtimer on the OTA Board.

To accomplish the rescue under the zero-sum rules of federal budgeting, Hollings proposed reductions of 1.2 percent in the budgets of several Congressional agencies, including the offices of the Architect of the Capitol and the Superintendent of Documents. The General Accounting Office would be clipped 1.92 percent. Unlike the House version, Hollings explained, the Senate bill for saving OTA would not be "taking it out of the hide of the Library of Congress."

Nonetheless, on July 20, the day of the debate and final vote on OTA in the Senate, the Director of the Library's

Congressional Relations Office, Geraldine M. Otremba, circulated a memo to key Senators expressing the Library's support for Senator Mack's bill, which would fund the Library and numerous other Capitol Hill functions, but provide only close-down money for OTA.

Otremba's memo stated: "We were alerted late last evening that the Senate would consider the Leg[islative] Branch bill this morning. The Librarian of Congress, Dr. James Billington, had been trying to call key Senate members to express his support of the bill as reported to the full Appropriations Committee by Senator Mack. Dr. Billington is particularly concerned that amendments to cut the Library's budget might be offered on the floor of the Senate, as one was

The Latest Crop of Reports From OTA

International Partnerships in Large Science Projects (GPO No. 052-003-01419-0; 132 pp., \$9).

Issue Update on Information Security and Privacy in Network Environments (GPO Stock No. 052-003-01416-5; 142 pp., \$11).

Electronic Surveillance in a Digital Age (GPO Stock No. 052-003-01418; 74 pp., \$5.50).

Wireless Technologies and the National Information Structure (GPO Stock No. 052-003-01421; 290 pp., \$19).

Order from: New Orders, Superintendent of Documents, PO Box 371954, Pittsburgh, Pa. 15250; tel. 202/512-1800; fax 202/512-2250. Add 25 percent for foreign orders.

unsuccessfully in [the Senate Appropriations] Committee [by Hollings] ... I am enclosing the fact sheet on the impact of these cuts should any amendment be offered today."

The memo did not mention OTA, but the accompanying fact sheet noted that the amendment that had failed in Committee, 11-13, would have continued OTA with funds taken from other Congressional agencies, including \$3.3 million from the Library. The loss of funds, the fact sheet stated, would require reductions in various important Library services.

The fact sheet then pointed out that the House version of the Legislative Appropriations bill "cuts \$16,588,000 only from the Library of Congress basic appropriation in order to continue funding OTA."

Asked by SGR whether Billington indicated to Congress that the Hollings plan met his concerns, a spokesperson for the Library said there were no further communications by Billington concerning OTA. At no point, SGR has found, did the Library extend a helping hand to the sinking OTA.

During the debate, Senator Patrick Moynihan (D-NY), speaking, he said, for the Joint Committee on the Library, cited "severe budget cuts and budget freezes" at the Library. The Hollings proposal was welcome, he said, because "it will

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. . . Still Alive: A Very Tiny Chance to Resurrect OTA

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not affect the Library of Congress"—which has been impaired by past cuts, he stated. "Our distinguished Librarian, Dr. James Billington," Moynihan said, "has made this clear in forceful, in cogent, and in concise terms. His argument has clearly prevailed." The New York Senator endorsed OTA, but in fairly cool terms, stating that "it has an important role. It has been here a quarter of a century. It was established for a role and it ought to continue."

The Senate floor debate on OTA alternated between reverence and disdain for the agency. "I cannot understand those who are committed to ignorance," declared Hollings, who went on to cite numerous OTA reports that he said had enlightened legislative deliberations.

"It is something that would be nice to have," replied Senator Harry Reid (D-Nevada), "if we had lots of money like we used to have."

Reid seemed to attach great weight to the weight of reports on Capitol Hill, noting that for \$22 million last year, OTA produced 50 reports, while CRS turned out 11,000 for \$60 million.

Another Republican member of the OTA Board, Senator Charles Grassley, of Iowa, counted up doctoral degrees to attack the contention that OTA's duties could be handled by the General Accounting Office. Not so, he said, noting that "only four percent of the GAO staff have PhDs, and few of these doctorates are in science or engineering. In contrast," he continued, "58 percent of OTA's staff has PhDs in these areas, and half of those hold degrees in hard sciences."

Senator Mack joined the battle, noting that an OTA supporter had traced the founding of the agency to Congress's desire for a counterpart to the White House Science Office. Sizing up OTA as a \$23 million organization with a staff of 203, Mack said, "Well, it is interesting that the [Clinton] administration has something like just under \$5 million for its science advisor, with 39 people."

Mack continued: "There is a sense that if we eliminate OTA, somehow science and technology in America will come to a crashing halt.... Is it not interesting," he asked, "that the computers we deal with today, somehow or other, magically occurred without the Office of Technology Assessment in the Congress of the United States?"

Mack and others wanted to know why OTA never performed a study of the ill-fated Superconducting Super Collider. Hollings replied that OTA conducts studies at the request of committee chairmen, "and the committee chairmen were already in favor of it, and they did not want that study." If the SSC had been studied by OTA, Hollings added, "we might have done away quicker with the super collider."

The appropriations bill, voting only termination funds for OTA, passed, 54-46, and slipped by a House-Senate conference July 28 on a tie vote.

Still remaining is a barely visible glimmer of hope for OTA. Rep. George Brown (D-Calif.), a member of the OTA

OTA Starts Closing Down

While job hunting and packing up, the OTA staff—about 115 professionals and 45 others—is preparing publication of some 30 final reports and other materials.

Director Roger Herdman told SGR last week that "we've got ten to fifteen million dollars worth of work in progress," and OTA hopes to see these efforts put to use, "instead of the government flushing it."

The reports range over a variety of topics, including environmental technology, interactive simulation of combat, health care and information technology, reducing earthquake damage, and laser surgery.

He said he expects that the forthcoming full-fledged reports will be distributed, as usual, through the Government Printing Office, while lesser items will be "desktopped" at OTA and made available somehow. In addition, Herdman said, OTA has accepted an offer from the National Academy of Sciences for Internet distribution of publications.

Herdman said that he and all hands are deeply disappointed by the decision to terminate OTA, but he said, "We had fair hearings in both houses and debates on the floor and in conference."

"We got a pretty fair run through the democratic process," he said, adding, "They got elected. I didn't."

The timetable and resources for closing down OTA are spelled out in the Appropriations Conference report for the Legislative Branch. Basically, OTA will be closed down by September 30, the end of the fiscal year. The bill provides for 17 employes to remain on the payroll beyond that date to attend to archiving of data collections, correspondence, and other materials that have accumulated since OTA's founding in 1972. It provides OTA with \$6.1 million to be expended through September 30, 1996, plus another \$150,000 to be available for another year.

The money is for severance pay—60 days for all employes who have been on board for at least six months and who have not taken another job—and for paying vendors, taxes on salaries, etc.

In recent months, as the prospects became gloomier, some members of the professional staff have moved to other jobs, but most are still on board.

Board, told a press briefing on August 2 that an attempt would be made to save OTA when the conference bill comes before the House next month. The possibility was rated as near-nonexistent at a briefing the next day by a well-placed opponent of OTA, Rep. Robert Walker (R-Pa.) of the House Science Committee, who's a close associate of Speaker Gingrich. OTA's sense of political reality says it's all over.

Good Money and Disputed Edict in NIH '96 Budget

The friends of biomedical research in the House have not only produced a surprisingly respectable budget for the National Institutes of Health—\$11.9 billion, \$642 million, or 5.7 percent, over this year's figure, and \$175 million more than the White House requested. But in strongly stated terms written into their appropriations report, they have directed NIH to shun the "disease of the month" lobbyists and navigate "on the basis of scientific opportunity."

Whether these high-sounding words are good or bad depends on whether you're managing NIH or besieging it. In addition, whether biomedical lobbying can be dampened by mere words is a separate and uncertain matter. But important consequences have flowed directly from the command on scientific strategy.

As a derivative of guidance by "scientific opportunity," the House appropriators discontinued the previous practice of providing a separately budgeted fund for NIH's Office of AIDS Research, stating, instead, that the Directors of NIH and the Office "should decide how much of the total appropriation should be allocated to AIDS research."

The AIDS provision, subsequently approved by the full House, has aroused strong protests from AIDS organizations and from parts of the NIH management, which views the measure as a downgrading of AIDS research and the office that was recently established for managing it. And it drew a written dissent from the five Democrats on the NIH Appropriations Subcommittee, led by the ranking member, Rep. David Obey (D-Wisc.) No amount of assurances have soothed these concerns, which arise from fear that Congressional conservatives view AIDS as mainly a self-inflicted misery whose victims have adroitly grabbed a special place in NIH spending.

The House report states that the Appropriations Committee "continues to support the Office of AIDS Research, its leadership, and its coordinated budget planning process." It adds that it expects all components of NIH "to fully cooperate with OAR's work" and that the NIH Director's decisions on AIDS-research funding "will be fully consistent with the plan developed by the OAR and that he will ensure that the Institutes allocate their budgets accordingly."

The scientific-opportunity directive is something new in NIH relations with Congress, which frequently has microdirected NIH to conduct research and explore remedies favored by lobbyists who have gained the interest of a Representative, Senator, or staff member.

Last year, for example, the Senate directed NIH to look into the value of shark cartilage as a cancer treatment. On the other hand, the stolid NIH bureaucracy remained long indifferent to the health-promoting potential of the behavioral sciences until a lobbying effort stimulated Congressional orders to provide money and staff for behavioral research.

For public consumption, the NIH apparatchiks insist that they have never done otherwise than pursue scientific opportunity. But the directive, attributable to Rep. John Porter (R-

NIH Urged to Boast

The House Appropriations Committee says NIH should talk louder about its role and prod its grantees to educate the public about where their research money comes from.

Directing NIH "to use all the media at its command to publicize the benefits and results of NIH research," the Committee report said the public should be made aware of "the funding sources for these breakthroughs." As part of this effort, the report "urges NIH to take whatever steps are necessary to ensure that its grantees acknowledge NIH's funding when they publicize their research findings."

Ill.), Chairman of the Appropriations Subcommittee for NIH, was plainly intended to shore up NIH's wobbly resolve in such matters. And it also helps to fend off the principle source of outside pressures on NIH resource allocation, members of Congress responding to lobbying in behalf of constituents personally concerned about dreadful diseases. Sometimes it's done alone by the afflicted and their loved ones, but more often "disease of the month" campaigners are available for hire, whatever the malady.

The report from Porter's Subcommittee reflects a strategic harmony with NIH Director Harold Varmus on "scientific opportunity" as the criterion for research.

Crediting Varmus with "compelling testimony ... about the problems inherent in using other decision rules to allocate funding," the report states that while "other factors are relevant, such as the infectious nature of a disease, the Committee believes that judgments based on numeric measures or other factors are fraught with potential bias. The Committee wants to avoid endorsing any methodology that could be characterized as focusing on the 'disease of the month.'

The report continues: "To enhance NIH's flexibility to allocate funding based on scientific opportunity, the Committee has attempted to minimize the amount of direction in the report accompanying this bill. For example, there are no directives to fund particular research mechanisms, such as centers or requests for applications. The Committee does believe it is appropriate to highlight disease areas of interest to Members of Congress, but does not intend for that to impede NIH's flexibility in decision-making."

The Senate Appropriations Committee has not yet acted on the NIH money bill, but the prospects of matching the 5.7 percent budget increase on that side of the Capitol are considered poor. As a result, there's renewed talk about establishing a trust fund for biomedical research, to be financed by a 25-cent tax on cigarettes. The idea is backed by Senator Mark Hatfield (R-Oregon), Chairman of the Senate Appropriations Committee. The difficulty is that new taxes, even earmarked for biomedical research, are political poison.

News Notes: Ag Queries, Space Station, Junkets

The House Agriculture Committee is widely circulating an extensive questionnaire on agricultural research policy issues in preparation for writing the research section of the 1995 farm bill.

The questions, 57 in all, were dispatched in recent weeks to universities, agricultural societies, federal and state agencies, and various individuals. The questions are organized under the following headings:

Research goals, priority setting, advisory boards, funding, delivery of research results, Land Grant Universities, the National Research Initiative Competitive Grants Program, the Agricultural Research Service, the Extension Service, the Current Research Information System, and International Relations.

The Committee says it welcomes all the responses it can get by the deadline of November 3. For a copy of the questionnaire: US House of Representatives, Committee on Agriculture, 1301 Longworth, atm. John Goldberg, Washington, DC 20515; tel. 202/225-2171.

Rep. George Brown (D-Calif.), a past champion of the Space Station, has turned against the celestial turkey because of the financial pressures it's imposing on other parts of NASA's over-stretched budget.

In a statement issued prior to a House vote July 27 that left the Space Station intact at \$2.1 billion while otherwise pruning the NASA budget, Brown criticized Congressional Republicans and the White House. Both, he said, believe that "we can cut indefinitely and still expect to keep major NASA centers open, still keep major programs afloat, and still keep the public confidence in our stewardship of NASA."

The House has voted to wipe out the Advanced Technology Program at the National Institute of Standards and Technology, but the ATP managers are blithely going ahead and awarding new contracts—24 of them announced on July 13, at a cost of \$60 million in ATP funds.

News of the commitments was not well received by House Science Chairman Robert Walker, an unrelenting disbeliever in the value of ATP's subsidies for industrial research. "It's a horrible mistake, another in a series of mistakes," Walker told a press briefing on August 3. In his view, ATP should honor its existing contracts and prepare to go out of business.

As with so many issues now in Congressional midstream, the Senate verdict is yet to come, and then there's a veto possibility at the White House.

Chairman Walker, incidentally, expressed interest in a new formula for achieving one of his major goals—creation of a US Department of Science. In past utterances, he indicated that the Department would be an assemblage of NSF, research functions of NASA and the Department of Energy, NIST, and various odds and ends. Recalling that

Henson Moore, a former top DOE official, had suggested at a hearing that DOE should be converted into the Department of Science, Walker said, "It's kind of an intriguing idea." But he added, "I haven't settled on anything."

With the House in recess, Science Chairman Walker and several committee members left Washington August 7 for a 10-day "oversight and policy trip" to Texas, California, and Alaska, with several other members scheduled to join them en route.

The destinations are: Johnson Space Center, Jet Propulsion Laboratory, Lawrence Livermore National Laboratory and UC Berkeley, Stanford University, Ames Research Center, Arctic National Wildlife Range, in Anchorage, and the University of Alaska. A Committee announcement said the delegation will take part in groundbreaking for the Alaska Spaceport, in Kodiak and will also look into "a proposal for space commercialization ventures based in Alaska."

Accompanying Chairman Walker for all or part of the trip: Reps. James A. Barcia (D-Michigan), Roscoe Bartlett (R-Md.), Eddie Bernice Johnson (D-Texas), Joe Barton (R-Texas), Dana Rohrabacher (R-Calif.), and Dave Weldon (R-Fla.).

Job Changes & Appointments

Lura J. Powell, founder and Chief of the Biotechnology Division at the National Institute of Standards and Technology, has been appointed Director of NIST's Advanced Technology Program (ATP). Powell, a chemist who has been with the agency for 23 years, succeeds ATP's founder and long-time Director, George Uriano, who recently retired. Powell's appointment coincides with a House vote to terminate ATP, a program Republicans deem "corporate welfare." The Senate is yet to act, while Republicans in both houses vow to abolish the parent Commerce Department and the White House threatens a veto if they try.

Richard D. Klausner, Chief of the Cell Biology and Metabolism Branch of the National Institute of Child Health and Human Development, has been appointed Director of the National Cancer Institute. The post is filled by Presidential appointment but does not require Senate confirmation. Klausner succeeds Samuel Broder, who retired in March and is now with the Ivax Corp., Miami, Fla.

Ruth David, Director of Advanced Information Technology at the Sandia National Laboratory, has been appointed Deputy Director for Science and Technology at the Central Intelligence Agency, succeeding James V. Hirsch, who has retired.

J. Carl Barrett, Chief of the Laboratory of Molecular Carcinogenesis at the NIH National Institute of Environmental Health Sciences, has been appointed Scientific Director and head of the Institute's Division of Intramural Research, a post he has held on an acting basis since December.

In Print

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From Rutgers University Center for Urban Policy Research:

Coming in From the Cold: The Future of Los Alamos and Sandia National Laboratories (Working Paper No. 91; 152 pp., \$7, plus \$3 for shipping), advocates a minimalist role for the two labs in the alluring field of nuclear-stockpile stewardship and says they should instead pursue economic survival in ongoing and new work in energy, environment, health, and transportation, along with expanded efforts in technology transfer and other benign activities. The report expresses agreement, however, with frequently heard complaints that lab-industry partnerships "are cumbersome, potentially discriminate against some firms for the benefit of others, and in many cases, only tangentially serve the public interest or result in job creation." With foresight and exploitation of their technical prowess, the report says, the labs can make the transition to peacetime work and help enrich the surrounding six-county area. The MacArthur Foundation and the Joyce-Mertz Gilmore Foundation provided support for the study, which was conducted, with the reported cooperation of the labs, by Ann Markusen, James Raffel, Michael Oden, and Marlen Llanes.

Order from: Center for Urban Policy Research, attn. Yvonne Hardie, PO Box 489, Piscataway, New Jersey 08855-0489; tel. 908/932-3101; fax 908/932-2363.

From the Science Policy Research Division of the Congressional Research Service (CRS), part of the Library of Congress, no charge:

Science Megaprojects: A Status Report on Policy Options for Priority-Setting and International Cooperation (95-764 SPR; 26 pp.), a CRS update on big projects, under way and hoped for, but this time against the background of Congressional commitment to cut R&D spending over the next seven years. The report says the effects on the megaprojects—threshold \$50 million—are not clear at this point, and it also expresses doubt about the adequacy of executive-branch arrangements for picking projects and working out international collaboration. Genevieve Knezo is the author.

The Delaney Clause Effects on Pesticide Policy (95-514; 6 pp.) a concise, clear review of the federal regulation most abhorred in the now-reigning anti-regulatory camp, the 1958 amendment to the Food, Drug and Cosmetic Act establishing zero tolerance for food additives "found to induce cancer when ingested by man or animal." The Risk Assessment and Cost Benefit Act, passed by the House, would essentially nullify the Delaney Clause by requiring cost-benefit analyses of chemical-residue decisions. But with cancer the underlying issue and public fright, a lot more will be heard on this one before Congress winds up for the year. The report is by Donna U. Vogt.

Order these reports through a House or Senate member. Senate switchboard, 202/224-3121; House, 202/225-3121. Cite the Congressional Research Service as the source, with report title and number.

From the General Accounting Office (GAO), no charge: Economic Statistics: Status Report on the Initiative to Improve Economic Statistics (GAO/GGD-95-98; 148 pp.), reports a mixed bag of results in fulfillment of the 1990-91 recommendations by the White House Council of Economic Advisers (CEA) for an Economic Statistics Initiative, aimed at improving the statistical output of various federal agencies. The agencies, says the GAO, received only \$54 million of the \$95 million they requested to carry out the upgrades. The Census, for example, sought \$7 million for a new annual survey of communications services, as part of increased attention to the role of the service sector. It got \$1 million. The sluggish progress on the Initiative is the least of the CEA's concerns. If the vote of the House is upheld in the Senate, the CEA goes out of business October 1.

Agriculture and the Environment: Information on and Characteristics of Selected Watershed Projects (GAO/RCED-95-218; 64 pp.), reviews a sampling from the 618 watershed-based projects, under way or planned in 1995, for controlling agricultural sources of pollution. The study was requested by Chairman Richard Lugar and Ranking Democrat Patrick Leahy of the Senate Committee on Agriculture, Nutrition, and Forestry.

Animal Agriculture: Information on Waste Management and Water Quality Issues (GAO/RCED-95-200BR; 85 pp.), also in response to requests from the two Senators, a review of water-quality issues related to the management of agricultural animal waste.

Nutrition Monitoring: Establishing a Model Program (GAO/PEMD-95-19; 88 pp.), as requested by Rep. George Brown, top Democrat on the Science Committee, a review of essentials for a topflight nutrition-monitoring program.

Order from: USGAO, PO Box 6015, Gaithersburg, Md. 20884-6015; tel. 202/512-6000; fax 301/258-4066.

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In Print

Official reports and other publications of special interest to the research community

(Copies of publications listed here are available from the indicated sources—not from SGR)

From the National Science Foundation, no charge: National Patterns of R&D Resources: 1994 (NSF 95-304; 105 pp.), one of the most comprehensive and useful publications in NSF's stream of statistical reports on R&D, providing data up to March 1995 and back for decades in many cases. With explanatory text, 35 tables cover expenditures and employment in numerous fields of basic, applied, and developmental research in government, academe, and industry. Among striking stats: in 1992—and probably still today—the US spent more on R&D, civilian and military, than the combined totals of Japan, Germany, France, the UK, and Italy. And, from 1986-94, spending on basic research in the US from all sources increased by an annual average of 4.7 percent in real terms-virtually the same as in 1980-85. The report, prepared by John E. Jankowski Jr. and John R. Gawalt in NSF's Division of Science Resources Studies, is now a biennial, appearing in the off years of NSF's mega-publication, Science & Engineering Indicators.

Asia's New High-Tech Competitors (NSF 95-309; 72 pp.), with Japan as the "benchmark," a review of the rapid development of home-based technological capacity in Hong Kong, Singapore, South Korea, Taiwan, China, India, Indonesia, and Malaysia. The report, by Lawrence M. Rausch, Senior Analyst in NSF's Division of Science Resources Studies, observes that the nations differ in stage, strength, and pace of technological progress, but says they're all on the way. Along with analytical discussions of the Asian nine, the report contains 24 tables on their educational enrollments, R&D expenditures, patents, high-tech trade, royalties, etc. The growing attractiveness of jobs at home for American-educated Asian nationals has been widely reported in the past. Forecasting the next stage, the report states: "The increased competition for S&T talent will not be restricted to Asian-born scientists and engineers, but will likely affect the ability of the United States to retain the top S&T talent now available to its industrial, university, and government sectors."

Women, Minorities, and Persons With Disabilities in Science and Engineering: 1994 (NSF 94-333; 404 pp.), covering math, science, and engineering, this is NSF's seventh biennial report to Congress on educational enrollments, interests, courses of study, career plans, degrees, etc. of males, females, various minorities and disabled persons. Included are scores of tables tracking these topics over the past decade or more. The report, bearing a cover date of November 1994, was delayed in printing.

Order from: NSF, Division of Science Resources Studies, Publications Unit, Suite 965, Arlington, Va. 22203-9966; tel. 703/306-1774; fax 703/306-0510. To obtain instructions on electronic access: tel. 703-306-0214.

SGR Summer Schedule

The next issue of *Science & Government Report* will be published September 15, 1995, after which the regular twice monthly schedule will resume.

From the Institute of Medicine (IOM), health-policy arm of the National Academy of Sciences:

HIV and the Blood Supply: An Analysis of Crisis Decisionmaking (8 chapters, plus appendixes; \$48, plus \$4 for shipping), a retrospective on institutional attention to the safety of the blood supply in the early years of the AIDS epidemic, 1982-86. The study, inspired by Congressional lobbying by hemophiliac groups in 1993 and assigned to the IOM by Health and Human Services Secretary Donna Shalala, adds little to the public record of widespread puzzlement compounded by fumbling, indecisiveness, and selfish protection of organizational territory. Among the few sterling performers cited in this woeful tale is Donald Francis, of the Centers for Disease Control, who, at a 1983 meeting, "recommended that blood banks question donors directly about their sexual behavior "and employ a series of revealing surrogate laboratory tests. The recommendation was rejected on grounds of costs, sexual discrimination, and because "many meeting participants were not convinced by the evidence that AIDS was transmitted by blood or blood products," the IOM reports. The IOM study concentrates on the medical and scientific response to the arrival of AIDS, but curiously neglects the Reagan Administration's skeptical indifference to reports of a fatal disease concentrated in homosexuals. Harold C. Sox Jr., Chairman of the Department of Medicine, Dartmouth Medical School, chaired the committee that prepared the report. Serving as co-editors with Sox were Michael Stoto, IOM Division Director, and Lauren Leveton, Study Director.

Order from: National Academy Press, 2101 Constitution Ave. NW, Washington, DC 20418; tel. 1-800/624-6242 or 202/334-3313.

From the National Biological Service:

Our Living Resources: A Report to the Nation on the Distribution, Abundance, and Health of US Plants, Animals, and Ecosystems (GPO Stock No. 024-010-00708-7; 530 pp., \$44), the first and possibly the last inventory and monitoring report from NBS, the fledgling agency slated for shrinkage and immersion in the US Geological Survey by the House [SGR, July 15], with perhaps even worse yet to come from the Senate. The report is a beautiful work, with some 200 peer-reviewed articles by federal, state, and academic specialists, and numerous color photographs and maps and charts. Mainly written in lay language, with bibliographic data and telephone contacts for professionals, the publication is organized by taxonomic group, geographic areas, ecosystem types, and impact assessments. Internet availability and CD-ROM versions are due later this year.

For the printed version: Superintendent of Documents, US Government Printing Office, Washington, DC 20402; tel. 202/512-1800; fax 202/512-2250.

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